SOUTH BAY
WATER RECYCLING

Via Electronic Mail & US, Mail

Charles R. Hoppin, Chair
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

ATTN: Jeanine Townsend, Clerk to the Board
commentletters@waterboards.ca.gov

RE: Proposed Draft General Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water ("General Permit")

Dear Chair Hoppin:

Thank you for the opportunity to comment once again on the proposed Draft General Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water ("General Permit'). As noted in our previous correspondence on this issue (Comment Letters dated June 26, 2008 and April 27, 2009), the City of San Jose is the lead agency responsible for South Bay Water Recycling, a regional program that annually serves over 10,000 acre-feet of nonpotable recycled water to nearly 600 customers in northern California's Silicon Valley. From our perspective as a producer and distributor of recycled water, we continue to be concerned that the current version of the Draft Discharge Requirements includes "overly restrictive water recycling requirements and added costs, thereby creating an obstacle to achieving the full potential for water reuse," the very obstacles that the General Permit is designed to remove.

As explained in detail in the attached "***Analysis and Suggested Revisions***" our comments address elements in all four sections of the proposed General Discharge Requirements (May 7, 2009 version), namely:

1) Inappropriate **Findings** that overstate the nature or degree of risk presented by the use of recycled water in an urban environment;
2) Overly restrictive **Prohibitions** limiting the use of recycled water in a manner consistent with the requirements of the California Department of Public Health (Title 22);

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3) Unnecessary **Specifications** regulating the operation, identification and signage of recycled water systems and the containment of recycled water within the use area;
4) Burdensome **Provisions** requiring detailed Irrigation Management Plans for individual Use Areas; and
5) Excessive **Monitoring and Reporting** requirements on Users, Distributors and Producers that provide no demonstrable value but which will discourage use of recycled water.

We appreciate the Board's continued interest in the comments of agencies that currently produce and distribute recycled water in California, and we also commend to your attention the comments of the Bay Area Clean Water Agencies (BACWA) and theWateReuse Association

Should you have any questions please contact me at 408.363.4721 or email eric.rosenblum@sanioseca.gov.

Sincerely,

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Division Manager
South Bay Water Recycling
Environmental Services Department
City of San Jose

cc: Ms. Michele Pla, Bay Area Clean Water Agencies
Dr. David Smith, Ph.D., WateReuse Association

City of San José Comments—May 26, 2009
Draft General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water (Revised, May 7, 2009)

Findings

1. We continue to have concerns that the Findings of the General Permit convey the impression that use of recycled water is hazardous to customers. While we understand that the findings must establish a basis for the State Board's jurisdiction, we believe that such standing can be established without overstating the risk to the public presented by the use of recycled water. For example, Paragraph 5, page 2 states:

   "5. The use of recycled water for landscape irrigation has characteristics which can create water quality and public health problems if improperly treated and managed. It is necessary to establish requirements for landscape irrigation uses of recycled water that ensure protection of water resources and public health. (e.g., pathogenic organisms, salinity and other waste constituents,and potential for unauthorized discharges)."

To the extent that this statement is true, the same could be said of any other water supply, including public drinking water supplies which can "create...public health problems if improperly treated and managed." We prefer language that places the degree of risk in perspective while still offering a basis for regulation by the State Board, such as the following:

   "5. Nonpotable recycled water has been demonstrated as an appropriate water supply for irrigation of publicly accessible landscape sites provided that it is treated to tertiary standards, its distribution system is separate from drinking water supplies, and its application is managed so as to avoid discharge to natural waterways regulated under the National Pollutant Discharge Elimination System (NPDES) permit process. As a result, it is necessary to establish certain minimum operational standards to ensure maintenance of public health and protection of water resources."

2. In paragraph 3, page 1, it is not necessary for the "Specified uses of recycled water" to include exceptions for unpermitted uses. So, for instance, it is sufficient to indicate that "vii. Commercial landscaping" is a suitable use, without further specifying "except eating areas." In the absence of any definition, "eating areas" is a vague term that could apply to any plot of grass on which people might conceivably lay a blanket to eat a picnic lunch. By the same token, the limitation of irrigation overspray on picnic tables or other specially constructed areas can be adequately covered in the "Best Management Practices" section.

3. Paragraph 13, page 4 and paragraphs 14 and 15, page 5 and paragraphs 16 and 17, page 6 implies that recycled water may be primarily responsible for adding salinity and nutrients to groundwater. As a result, the General Permit appears to reject the findings of the State Water Resources Control Board Recycled Water Policy which states that "Regulation of recycled water alone will not address [groundwater salinity] conditions." The Permit further appears to violate the Policy by placing additional requirements on recycled water producers to reduce nutrients and salinity in recycled water in advance of the implementation of a regional nutrient and/or salinity control plan. We suggest replacing paragraphs 13-17 with a

paragraph directly implementing Section 6 of the Recycled Water Policy within the permit structure as follows:

"13. According to Board Resolution 2009-0011. "It is the intent of this Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board finds that the appropriate way to address salt and nutrient issues is through the development of regional or subregional salt and nutrient management plans rather than through imposing requirements solely on individual recycled water projects." As such, irrigation projects regulated by this General permit shall participate in regional salinity and nutrient management plans. In advance of the completion of such plans, recycled water producers shall make every effort to reduce the amount of nutrients and salinity present in recycled water to the extent practicable through the implementation of Best Management Practices including appropriate source control measures."

4. Similarly, Paragraphs 19 through 22 on pages 6 and 7 appear to overstate the significance of CECs in recycled water in contradiction of State Board Resolution 2009-0011 by framing the need to understand constituents and chemicals of emerging concern as exclusively or primarily a recycled water issue. We suggest replacing these paragraphs with a paragraph directly implementing Section 10 of the Recycled Water Policy as follows:

"19. Consistent with Board Resolution 2009-0011, the identification, quantification, and concentration limits of CECs in recycled water distributed by projects regulated under this General Permit shall be consistent with any CDPH recommendations to protect public health subject of future investigations by a "blue-ribbon" advisory panel convened by the State Board to guide future actions relating to constituents of emerging concern."

Prohibitions, Specifications and Provisions

5. Paragraph 9 on page 12 prohibits the use of hose bibs, even in areas inaccessible to the public. This limitation exceeds that of Title 22 which only prohibits the use of hose bibs "in areas subject to public access." It should deleted or be revised to match the Title 22 requirement.

6. Paragraphs 10 on page 12 prohibits the use of tanks or other equipment use for recycled water from being used to convey potable water, even when such equipment has been disinfected or when the potable water is being conveyed strictly for nonpotable purposes. It should be revised to allow for these conditions as follows:

10. Use of any equipment or facilities that have been used to convey recycled water (e.g., tanks, temporary piping or valves, and portable pumps) may not be used to convey potable water unless it has been first adequately disinfected or unless the potable water is being conveyed for strictly nonpotable uses (e.g. dust control).

7. Paragraph 6 on page 13 appears to restrict the use of recycled water to specific hours in order to accomplish the general goal of minimizing public exposure. This limitation is not required by Title 22 regulations and should be deleted or modified to be consistent with CDPH regulations, for example:

"6. Use Areas that are spray irrigated and allow public access shall be irrigated in such a manner as to minimize public contact with recycled water."

8. Paragraph 7 on page 13 does not distinguish between new recycled water distribution facilities and existing facilities, e.g. existing irrigation systems converted to recycled water use. In the latter instance, the Department of Public Health does not require that existing underground facilities be labeled or color-coded to distinguish them from potable facilties, as doing so would be cost-prohibitive and adequate protection can be accomplished through proper system management and maintenance of record drawings. This paragraph shold be revised to be consistent with CDPH regulations, for example:

   "7. All new reclamation equipment, pumps, piping, valves, and outlets shall be appropriately marked to differentiate them from potable facilities. All new reclamation distribution system piping shall be purple or adequately identified with purple tape, tags, or stickers per Section 116815(a) of the California Health and Safety Code. ***Existing facilities shall be identified to the degree practical, and it shall be the responsibility of the User to ensure that such facilities remain separated from potable facilities.***

9. Paragraph 12 on page 14 requires the use of signage shown in Attachment D which includes an international symbol and a water glass. Although this Prohibition provides for the use of alternate wording, it does not allow for alternate graphic representations. In San Jose, for example, alternate images that have been approved by CDPH are preferred to the international symbol and are in general use (see Attachment 1). This paragraph should be revised to allow for alternative signs consistent with CDPH regulations which state that "The Department may accept alternative signage and wording, or an educational program, provided the applicant demonstrates that the alternative approach will assure an equivalent degree of public notification."

10. Paragraph 14 on page 14 is impractically restrictive in requiring that "recycled water shall be managed to avoid contact with workers." It should be revised to indicate that "Employees who regularly come in contact with recycled water shall be instructed in proper sanitary and shall minimize contact with recycled water to the extent practical."

11. Paragraph 5 on pages 16 and 17 requires the preparation of an Irrigation Management Plan for each use area specifying soil characteristics, recycled water characteristics, plant species and other information. The collection and interpretation of this information on a site specific basis for hundreds and thousands of individual customers is neither practical nor necessary to ensure that recycled water is applied at agronomically appropriate rates. To the extent that the General Permit mandates the preparation of detailed plans or reports, the use of recycled water will likely be further curtailed and not facilitated as required by AB 1481.

    The requirement for the Irrigation Management Plans (as well as the Monitoring and Reporting Program commented on below) were discussed in more detail during the May 21, 2009 conference call with Board staff at which an alternate approach to reporting and monitoring was developed. With respect to the Irrigation Management Plan, the Board is encouraged to pursue this alternate approach and revise Paragraph 5 on pages 16 and 17 in its entirety and replace it with a requirement to provide information to Site Supervisors on the nutrient content of recycled water and Best Management Practices to support the successful cultivation of specific landscape species.

Monitoring and Reporting Program (MRP)

12. As many agency representatives commented during the May 19, 2009 Board hearing on this issue, the daily logs and weekly monitoring reports required by the General permit would have the effect of discouraging all be the most committed customers from using recycled water. The Annual Self-Inspection Reporting currently required by the SWRCB is effective and appropriate and should be instituted in place of the suggested program. As discussed in greater detail in the comments of the California WateReuse Association, we strongly suggest that the Board adopt the approach developed during the May 21, 2009 conference call which included annual reporting by the Administrator of the amount of recycled water applied on a regional basis, as well as recycled water quality, salinity and nutrient concentrations.

Attachment 1: Alternate Advisory Sign Design